Burnett (6. H.)

Winds of

THREE CASES OF TINNITUS AURIUM AND DEAF-NESS, ACCOMPANIED BY VERY DISTINCT FLUSH-ING OF THE CUTANEOUS SURFACE ADJACENT TO THE EAR.

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I HAVE been induced to make known the clinical facts connected with these three cases, not only because they are of interest in their otological connection,—for as ear-cases simply they came to my notice,—but because such cases of flushing of the cutaneous surface anywhere, whether from external violence or central irritation of the sympathetic nerve, are rare, and in many respects unsolved. I was asked to see, in consultation with Dr. T. Hollingsworth Andrews, of this city,

CASE I.—The patient was a young lady, living in affluence, 26 years old, of a large, handsome figure, unmarried, residing in the western part of Pennsylvania.

Six years previous to the time I saw her, she had suffered from an attack of rheumatic facial paralysis on the right side. Within two or three years she has noticed a diminution in hearing, accompanied by an uninterrupted and distressing tinnitus aurium.

The hearing is reduced on the right side to $\frac{3}{60}$, on the left to $\frac{6}{60}$ for the watch.

The tuning-fork, placed on the vertex, is heard best in the better ear. The membrana tympani on the right side is more retracted than on the left. Lustre good. Eustachian tubes pervious.

There is constantly considerable quivering of the facial and labial muscles, and there is a marked purplish-red flush over the cheeks and neck as far as the clavicle, with an increase in the tinnitus, whenever the patient is ordinarily excited or fatigued. The application of the constant electric current from a Brenner apparatus, at the time of the examination, afforded not even a temporary relief to the tinnitus.

Case II.—Mrs. Van C., aged 56 years, farmer's wife, a small, spare woman, states that at the menopausis she experienced a sudden and excessive tinnitus aurium, which, however, has diminished in severity since then; but, although quite endurable, has never entirely ceased.

The hearing is not affected in this case. There is, however, a peculiar vascular congestion or flushing, looking like a thin carmine stain, which comes on with any considerable excitement or fatigue; is attended by an increase in the tinnitus, and extends from the ears, simultaneously over each sterno-cleido mastoid muscle, forward towards the thyroid gland, where the blushes of each side coalesce and extend over the chest and mammæ. At the same time, a similar blush extends over the nucha and upper part of the dorsum, and the patient is apparently enveloped in a carmine-colored apron, with the limits already designated. The rest of the surface is sallow. In this case the tinnitus diminished under the use of strychnia $(\frac{1}{60}$ gr. t. d.) for a month; but upon discontinuing the drug, the tinnitus returned partially.

The flushing in this case is different from that subjective flushing ex-

perienced by females at the menopausis.

CASE III.—Mrs. McA., of Delaware, a very large, strong woman, aged 45, living in a malarial district, and now pregnant with the eleventh child. The patient states that she has had an increasing hardness of hearing with tinnitus, on both sides for some years.

The membranæ tympani are opaque. In her case there is a peculiar vascular flush on the left cheek, corresponding to the ear most afflicted with the tinnitus, aggravated by exertion, heat, or cold, and coincident with an increase in the tinnitus.

This case improved under strychnia ($\frac{1}{45}$ gr.) three times daily, and the daily use of the constant electric current for a week. As she was obliged to return to her home at a distance, the electric treatment was discontinued, with a hope of its resumption after the termination of her pregnancy, if the tinnitus should demand further treatment.

Unfortunately, I have been unable to continually observe these cases, as they have all resided at great distances from me.

Their histories will, nevertheless, afford examples of tinnitus aurium and reddening of the surface brought about most probably by an irritation of the sympathetic nerve, and may add something to the knowledge of a form of aural disease to be considered one in which the nervous element truly predominates.

In a case of direct mechanical violence to the sympathetic

nerve,* the only known case at that time on record, "the face presented, after walking in the heat, a distinct flush on the right side, and was pale on the left. The right half of the face was very red. The flush extended to the middle line, but was less definite as to its limit on the chin and lips than above these points."

Dr. Wm. Ogle† has reported an instance of probable destruction of the right cervical sympathetic by abscesses. In this case "the eyeball was retracted, the palpebral fissure narrowed, the pupil contracted, the right side of the face redder and hotter than the left during repose, but after violent exercise or fever, colder. The left side of the face alone sweated, and the right side of the mouth and tongue was complained of as being dry."

In a case, under the care of M. Trélat, at the St. Louis, in Paris,‡ in which the sympathetic nerve had been destroyed by an operation for removal of a deep-seated tumor of the neck, "on the day following the operation, the face was deeply congested, especially on the right side, which displayed well-defined patches of a violet and red color."

I have cited these cases, because they present instances of flushing from a known and direct lesion of the sympathetic nerve. In the three cases I have related without any history of violence to the sympathetic, we have marked flushing with tinnitus aurium. There is no mention of this latter symptom in any of the cases I have referred to, nevertheless I think it is evident we may conclude that in cases such as I have observed, the sympathetic nerve is affected, and to it our treatment should be directed.

As published accounts of cases similar to the three I have described, are rare, I have thought that these I have given might not be devoid of interest to the readers of the Archives.

^{* &}quot;Gunshot and Other Injuries of the Nerves." Mitchell, Morehouse & Keen. 1874. Philadelphia.

[†] Medico-Chirurgical Trans., Vol. LII., p. 154.

[‡] From abstract in Med. Press and Circular, p. 78, Jan., 1869.

